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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,628	09/15/2003	Hyun Jin Kim	0EKM-107186	9751

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EXAMINER

GORDON, RAEANN

ART UNIT	PAPER NUMBER
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3711

DATE MAILED: 12/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

10/662,628

Applicant(s)

KIM ET AL.

Examiner

Raeann Gorden

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
 4a) Of the above claim(s) 52-57 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-51 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 12/8/03; 12/30/03.
 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) ☐ Notice of Informal Patent Application (PTO-152)
 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I in the reply filed on 9-20-04 is acknowledged. The traversal is on the ground(s) that all claims can be examined without serious burden. This is not found persuasive because the method claims of Group II require a different search than the golf ball claims in Group I. Applicant's arguments with respect to claim 51 are not understood. Claim 51 can be examined with the golf ball claims of Group I because the method steps are generic. The remaining method claims will be rejoined if the generic method claim is found allowable.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear which crosslinking agent is claimed in claims 1, 30, and 51. Paragraphs 29 and 30 disclose unsaturated carboxylic acid as well as peroxides as crosslinking agents. The claims should clearly indicate which ingredient is claimed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-16, 18-32, and 34-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Voorheis et al (2004/0230006). Regarding claims 1 and 51, Voorheis discloses a golf ball core composition comprising 1,4-polybutadiene, more than one peroxide (crosslinking agent), and zinc pentachlorothiophenol (peptizer). Regarding claims 2-4, peroxide (crosslinking agent) is present in the amount from 0.2 to 5 pph (para. 122). Regarding claim 5, the composition may include more than one type of peroxide, examples include 1,1-bis(tert-butylperoxy)-3,3,5-trimethylcyclohexane and 2,5-di-(tert-butylperoxy)-2,5-dimethyl hexane (para 119). Examples are identical to applicants, see paragraph 31 of the present specification. Regarding claims 8-11, zinc pentachlorothiophenol (peptizer) is present in the amount from 1 to 25 pph (para. 105). See table 2 wherein the examples include 2.35 pph zinc pentachlorothiophenol. Regarding claims 13-17, mercaptobenzothiazole (accelerator) is present in the amounts of 0.5, 1.0, 2.0, 3.0, and 5.0 (see table 2, ZETAX). Regarding claim 18, the core composition is made from 1,4-polybutadiene (para. 65). Regarding claims 19-21, the

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core composition includes filler such as zinc oxide, barium sulfate, and tungsten (para. 137). Regarding claims 23-24, the core composition includes metal salts of unsaturated carboxylic acid in the amount from 20 to 40 pph (para. 130, 133). Regarding claim 25, the golf ball includes a core and cover, wherein the core is made from the composition (see above). Regarding claim 26, the core may include multiple layers (para. 40). Regarding claim 27, a portion of the core may be liquid (para. 63). Regarding claim 28, the golf ball may include a wound layer (para. 59). Regarding claim 29, the golf ball includes a core, intermediate layer, and cover, wherein the core is made from the composition; see above (para. 59). Regarding claims 30-32 and 36, Voorheis discloses a golf ball core composition comprising 1,4-polybutadiene, more than one peroxide (crosslinking agent), and zinc pentachlorothiophenol (peptizer). Peroxide (crosslinking agent) is present in the amount from 0.2 to 5 pph (para. 122). Zinc pentachlorothiophenol (peptizer) is present in the amount from 1 to 25 pph (para. 105). See table 2 wherein the examples include 2.35 pph zinc pentachlorothiophenol. Regarding claim 33, the composition may include more than one type of peroxide, examples include 1,1-bis(tert-butylperoxy)-3,3,5-trimethylcyclohexane and 2,5-di-(tert-butylperoxy)-2,5-dimethyl hexane (para 119). Examples are identical to applicants, see paragraph 31 of the present specification. Regarding claim 38, mercaptobenzothiazole (accelerator) is present in the amounts of 0.5, 1.0, 2.0, 3.0, and 5.0 (see table 2, ZETAX). Regarding claim 39, the core composition is made from 1,4-polybutadiene (para. 65). Regarding claims 40-42, the core composition includes filler such as zinc oxide, barium sulfate, and tungsten (para. 137). Regarding claims 44 and 45, the core

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composition includes metal salts unsaturated carboxylic acid in the amount from 20 to 40 pph (para. 130, 133). Regarding claim 46, the golf ball includes a core and cover, wherein the core is made from the composition (see above). Regarding claim 47, the core may include multiple layers (para. 40). Regarding claim 48, a portion of the core may be liquid (para. 63). Regarding claim 49, the golf ball may include a wound layer (para. 59). Regarding claim 50, the golf ball includes a core, intermediate layer, and cover, wherein the core is made from the composition; see above (para. 59).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voorheis in view of Nesbitt et al (6,468,168). Voorheis discloses the invention as shown and above, including fillers in the composition. However, Voorheis fails to disclose the quantity of the fillers. Nesbitt teaches a golf ball core composition comprising fillers in the amount from 10 to 100 parts. One of ordinary skill in the art would have modified the Voorheis in view of Nesbitt to achieve the desired weight of the golf ball.

Claims 6, 7, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voorheis in view of Nesbitt et al (6,468,168) and further in view of

Higuchi et al (2004/0019149). Voorheis in view of Nesbitt discloses the invention as shown above but fails to disclose quantity of the peroxides (crosslinkers). However, Higuchi teaches a golf ball core composition comprising two peroxides in a ratio of at least 50:50 (para. 71).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raeann Gorden whose telephone number is 571-272-4409. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 571-272-4415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rg
November 23, 2004



RAEANN GORDEN
PRIMARY EXAMINER